

**WHAT IS CLAIMED IS:**

- 1) A composition comprising:
  - a) an effective amount of zinc-containing layered material;
  - b) an effective amount of a surfactant including a surfactant with an anionic functional group;  
wherein the zinc-containing layered material has a relative zinc lability of greater than about 15%.
- 2) A composition according to Claim 1 wherein the composition further comprises an effective amount of a pyrithione or a polyvalent metal salt of a pyrithione.
- 3) A composition according to Claim 2 wherein the pyrithione or polyvalent metal salt of pyrithione is zinc pyrithione.
- 4) A composition according to Claim 1 wherein the surfactant with an anionic functional group is about 1% to about 50% of the total composition.
- 5) A composition according to Claim 2 wherein the ZPT is present from about 0.01% to about 5%.
- 6) A composition according to Claim 1 wherein the surfactant is present from about 2% to about 50%.
- 7) A composition according to Claim 6 wherein the surfactant is selected from the group consisting of anionic, cationic, nonionic, amphoteric or zwitterionic.
- 8) A composition according to Claim 7 wherein the surfactant is anionic.
- 9) A composition according to Claim 1 wherein the pH is greater than about 6.5 .
- 10) A composition according to Claim 9 wherein the pH is from about 6.8 to about 9.5

- 11) A composition according to Claim 10 wherein the pH is from about 6.8 to about 8.5.
- 12) A composition according to Claim 1 wherein the zinc containing material has a relative zinc lability of greater than about 20%.
- 13) A composition according to Claim 1 wherein the zinc containing material has a relative zinc lability of greater than about 25%.
- 14) A composition according to Claim 1 wherein the zinc-containing layered material is selected from the group consisting of basic zinc carbonate, zinc carbonate hydroxide, hydrozincite, zinc copper carbonate hydroxide, aurichalcite, copper zinc carbonate hydroxide, rosasite, phyllosilicate containing zinc ions, layered double hydroxide, hydroxy double salts and mixtures thereof.
- 15) A composition according to Claim 14 wherein the zinc-containing layered material is selected from the group consisting of zinc carbonate hydroxide, hydrozincite, basic zinc carbonate and mixtures thereof.
- 16) A composition according to Claim 15 wherein the zinc-containing layered material is hydrozincite or basic zinc carbonate.
- 17) A composition according to Claim 16 wherein the zinc-containing layered material is basic zinc carbonate.
- 18) A composition according to Claim 1 wherein the composition further comprises a cationic deposition polymer.
- 19) A composition according to Claim 1 wherein the composition further comprises a conditioning agent.

- 20) A composition according to Claim 1 wherein the composition further comprises a suspending agent.
- 21) A composition according to Claim 20 wherein the suspending agent is selected from the group consisting of crystalline suspending agent, polymeric suspending agent or mixtures thereof.
- 22) A composition according to Claim 21 wherein the suspending agent is a crystalline suspending agent.
- 23) A method of treating microbial infections comprising the use of the composition of Claim 1.
- 24) A method of treating fungal infections comprising the use of the composition of Claim 1.
- 25) A method of treating dandruff comprising the use of the composition of Claim 1.